

Remarks

The following remarks herein are responsive to the Office Action mailed on 02/25/05. Claims 1-29 are pending in this application.

Accordingly, claims 1-29 are presented for examination and are believed to be in condition for allowance in light of the remarks infra. Also accompanying this communication is a petition to extend the prosecution on this matter for three months and the appropriate fee.

Discussion of the Office Action

In the Office Action of February 25, 2005, the Examiner rejected claims 1-4 under 35 U.S.C. §102(b), and he rejected claims 5-7 and 9-29 under 35 U.S.C. §103(a).

Rejection of claims 1-4 under 35 U.S.C. §102(b)

As set forth above, claims **1-4** stand rejected under 35 U.S.C. §102(b) as being anticipated by Boswell et. al (U.S. Patent Publication No. 2002/0003635 A1). The Examiner states, “Boswell discloses an optical element, comprising: a sinusoidal profile substrate (30 of Fig. 2), an adhesion layer, having a predetermined thickness deposited on said profile (20 of Fig. 2), a layer comprising silver, having a predetermined thickness deposited on said layer (18 of Fig. 2); and a passivation layer, having a predetermined thickness deposited on said silver layer (16 of Fig. 2).” Applicants respectfully must traverse such a rejection.

Applicants' claim 1 is as follows:

An optical element, comprising:

a non-planar profile substrate,

an adhesion layer, having a predetermined thickness deposited on said non-planar profile,

a layer comprising silver, having a predetermined thickness deposited on said adhesion layer; and

a passivation layer, having a predetermined thickness deposited on said silver layer.

Applicants respectfully submit that Boswell et al does not disclose nor suggest any of the claim limitations as shown bolded above in Applicants' original claim 1.

First, Boswell does not disclose or suggest anywhere "a non-planar profile substrate as shown in Applicants' element 1 of claim 1. The Examiner, as set forth above, stated that Boswell discloses a sinusoidal profile substrate, as shown by the reference numeral 30 of Fig. 2 in the cited reference. However, reference numeral 30 of Fig. 2 is disclosed by Boswell (see paragraph [0024]), as "[a] shim having a face 31 with a holographic image or a diffraction grating image embossment 32 formed therein." The shim material (i.e., reference numeral 30 of Fig. 2 as cited by the Examiner) is not operating as a substrate having subsequent deposited materials as shown in Applicants' claim 1, because it is not utilized as a supporting material but is instead utilized to imprint an image into a composite layer (e.g., a wax layer indicated as reference numeral 20 in Fig. 2 as part of the composite), wherein the composite layer can be adhered to a planar substrate during embossment with heat treatment.

Boswell does disclose a substrate and expressly indicates it as such by (see paragraph [0024], line 10) reference numeral 22 of Fig. 2 (also see Figs. 1, 3, 4, 5, and 6, reference numeral 22; and Figs. 7, 8, 9, and 10, reference numeral 222). Such a substrate, as indicated by the cited reference numerals in Boswell, is shown as a planar surface and **not** “a nonplanar profile substrate” as claimed by the Applicants of the present invention. Accordingly, Boswell, does not disclose or suggest a non-planar profile substrate as shown in element 1 of Applicants’ claim 1.

Second, because the shim (i.e., reference numeral 30, of Fig. 2 as cited by the Examiner) is not operating as a substrate as disclosed and claimed in claim 1, it necessarily follows that **Boswell does not disclose or suggest “an adhesion layer....deposited on said non planar profile”** as disclosed by Applicants and as shown in element 2 of claim 1. The Examiner, as set forth above, states that Boswell discloses “an adhesion layer...deposited on said profile (20 of Fig. 2).” However, 20 of Fig. 2, is disclosed by Boswell as a wax layer and not an adhesion layer (see paragraph [0024] and for an even more detailed description of the wax layer, see paragraph [0022]. Such a wax layer instead (see paragraph [0024] “functions to prevent any particles of metal from the layer of metal 18 from reaching the face 31 or the holographic image or diffraction grating image embossment 32 formed in the face 31 of the shim 30.”

Boswell does disclose an adhesion layer, (reference numeral 24 of Fig. 2) but such an adhesion layer is not applied to a non-planar profile as claimed by Applicants but instead is applied to a planar profile surface as shown in every figure in Boswell and as disclosed throughout Boswell (e.g., again see paragraph [0024]). Thus element 2

of Applicants claim 1 is also not disclosed or suggested by Boswell as stated by the Examiner.

Third and Forth, it necessarily follows that the silver and passivation layer limitations as disclosed and claimed by Applicants, as shown in claim 1 above, are also not disclosed or suggested by Boswell.

It is well established under MPEP 706.02(a) that for a reference to support a rejection under 35 USC §102, that reference must teach each feature recited in the claims so rejected.

Accordingly, the rejection of claim 1 and dependent claims 2-4, which contain all the limitations of claim 1, under 35 U.S.C. §102(b), is deemed improper and should be withdrawn.

Rejection of claims 5-7 and 9-29 under 35 U.S.C. §103(a)

As set forth above, claims 5-7 and 9-29 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Boswell et. al. (U.S. Patent Publication No. 2002/0003635 A1). Applicants must traverse such a rejection.

Under MPEP §2143.03:

"To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art." *In re Royka*, 490 F. 2d 981, 180 USPQ 580 (CCPA 1974). Applicant respectfully traverses such a rejection.

Regarding claims 5-7, such claims depend upon base claim 1 and thus contain each and every limitation in claim 1 in addition to their own limitations. Applicants submit that in light of the above arguments regarding the rejection of claim 1 under 35

U.S.C. §102(b), an obviousness rejection of such claims is not warranted as mandated under MPEP §2143.03 because Boswell does not teach or suggest the limitations of claim 1 from which the rejected claims depend from.

In addition:

Under MPEP §2143.01, “If an independent claim is nonobvious under 35 U.S.C. §103, then any claim depending therefrom is nonobvious.” In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).

Accordingly, because claim 1 is deemed nonobvious in light of the discussion regarding the rejection of claim 1 under 35 U.S.C. §102(b), the rejection of dependent claims 5-7 are also deemed improper under MPEP §2143.01 and should be removed.

Regarding the rejection of independent claim 9 and dependent claims 10-22, which depend from claim 9 and thus contain all the limitations of claims 9; element 1 of claim 9 in particular, comprises “a diffraction grating” and element 2 of claim 9 comprises “an adhesion layer,” is deposited on “said diffraction grating.” Boswell, as similarly discussed above, does not disclose or suggest such limitations anywhere within the four corners of the cited reference. As stated above, Boswell, see paragraph [0024], discloses a shim (i.e., reference numeral 30) for embossing an image of a diffraction grating but Boswell does not disclose or suggest having a diffraction grating with novel deposition layers deposited thereon.

Accordingly, in light of the above, the rejection of independent claim 9 and dependent claims 10-22, which depend from claim 9 and thus contain all the limitations of claim 9, are deemed improper and is requested to be removed.

Regarding method claims 23-29; independent claim 23 is as follows:

A method, comprising:

providing a non-planar profile substrate,

depositing an adhesion layer having a predetermined thickness on said non-planar profile, wherein said adhesion layer comprises at least one material selected from the group consisting of: nickel, nickel nitride, chromium, chromium nitride, nickel-chromium alloys, silicon-nitride, and nickel-chromium nitride,

depositing a layer of silver having a predetermined thickness on said adhesion layer; and

depositing a passivation layer having a predetermined thickness on said silver layer, wherein said passivation layer comprises at least one material selected from the group consisting of: nickel, nickel nitride, chromium, chromium nitride, nickel-chromium alloys, silicon-nitride, and nickel-chromium nitride.

Applicants respectfully submit that similar to the discussion above for the rejection of claim 1 under 35 U.S.C. §102(b), Boswell also does not disclose or suggest anywhere the bolded limitations as shown above in Applicants' method claim 23.

Accordingly, because Boswell does not disclose or suggest any of the claim limitations as mandated under MPEP §2143.03, an obviousness rejection under 35 U.S.C. §103(a) is not warranted and the rejection of claim 23 is requested to be removed.

Regarding claims **24-29**, such claims directly depend from base claims 23: As stated above, Under MPEP §2143.03:

"To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art." *In re Royka*, 490 F. 2d 981, 180 USPQ 580 (CCPA 1974). Applicant respectfully traverses such a rejection.

In addition:

Under MPEP §2143.01, "If an independent claim is nonobvious under 35 U.S.C. §103, then any claim depending therefrom is nonobvious." *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).

Accordingly, in light of the above arguments regarding the rejection of claim 23 under 35 U.S.C. §103(a), the rejection of claims **24-29** is also deemed improper, as mandated under MPEP §2143.03 and MPEP §2143.01, and is requested to be removed.

Allowable Subject Matter

Claim 8 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claims. Claim 8 depends from claim 1, which stands rejected under 35 U.S.C. 102(b).

In light of arguments as set forth above with respect to the rejection of claim 1, Applicants respectfully submit that the objection to claim 8, which depends from claim 1 and thus contains all the limitations of claim 1, has been overcome and therefore has not been rewritten or amended.

Conclusion

Based on arguments as discussed above, each objection and rejection is believed overcome and Applicants respectfully request allowance of the pending claims. Thus, this application is deemed to be in condition for allowance based on claims 1-29.

In the event that the Examiner finds any remaining impediment to the prompt allowance of these claims that can be clarified with a telephone conference, he is respectfully requested to initiate the same with the undersigned at (925) 422-3682.

Respectfully submitted,

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